Audit of Forest Planning and Practices

Western Forest Products Inc.
Tree Farm Licence 39
Blocks 2 and 5

FPB/ARC/221

December 2018
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In July 2018, the Board audited the forest planning and practices of Western Forest Products Inc. (Western) on tree farm licence (TFL) 39. This is the third Board audit of TFL 39 since 2008, and different geographic areas within the TFL were examined each time. The results of this audit and the previous two show a similar positive pattern—all were “clean” audits, meaning that all planning and practices fully complied with the Forest and Range Practices Act and the Wildfire Act. The Board also reported a notable practice for protection of fish streams in the 2008 audit.

Through these audits, the Board has found that Western is carrying out sound forest practices that warrant public confidence. A key factor in this success is the commitment and professionalism shown by Western’s staff, from management through to the operational staff on the ground. The Board commends Western for its continued good forest management on TFL 39.
Introduction

The Forest Practices Board is the public's watchdog for sound forest and range practices in British Columbia. One of the Board’s roles is to audit forest industry practices to ensure compliance with the Forest and Range Practices Act (FRPA) and the Wildfire Act.

As part of its 2018 compliance audit program, the Board randomly selected the Campbell River Natural Resource District as a location for a full scope compliance audit. Within the district, the Board selected Western Forest Products Inc.’s (Western) tree farm licence (TFL) 39 for audit.

This report describes what the Board audited and the results. Detailed information about the Board’s compliance audit process is provided in Appendix 1.

Audit Results

Background

TFL 39 is made up of four geographically distinct blocks, and two of those blocks were the subject of this audit. Block 2 is located near Sayward on Vancouver Island, and Block 5 is located on the mainland coast in the Phillips River watershed (see map on page 2).

The forests of Block 2 are dominated by hemlock and balsam with Douglas-fir in the lower elevation second growth forests. In Block 5, the forests are made up of mainly hemlock, balsam and western red cedar. Block 5 is within the Great Bear Rainforest, and there has been no logging there since 2007. In Block 2, Western harvested approximately one million cubic metres of timber during the one-year audit period.
Audit Approach and Scope

This was a full scope compliance audit and all activities carried out between July 1, 2017, and July 27, 2018, were eligible for audit. These activities included operational planning (forest stewardship plans (FSP) and site plans), timber harvesting, wildfire protection, silviculture, and construction, deactivation and maintenance of roads and major structures.¹

Auditors assessed these activities for compliance with FRPA, the Wildfire Act, and applicable regulations. This work included interviewing licensee staff, reviewing FSPs and site plans, examining records, and visiting sites to review field practices. Sites were accessed by truck and by helicopter.

The standards and procedures used to carry out this audit are set out in the Board’s Compliance Audit Reference Manual, Version 7.1, July 2016.

¹ Major structure includes bridges and major culverts.
- Bridge means a temporary or permanent crossing structure with a span length equal to or greater than 6 metres or an abutment height of 4 metres or greater.
- Major culvert has a pipe diameter of 2 metres or greater or is a pipe arch or open bottom arch with a span greater than 2.13 metres.
Three forest professionals, a professional engineer, and a chartered professional accountant made up the audit team. This team was in the field with licensee representatives during the week of July 23-27, 2018.

**Planning and Practices Examined**

**Operational Planning**

For activities in Block 2, Western operated under its *Central Island Forest Operation Forest Stewardship Plan*, which was approved in May 2017. Western’s *Mainland Coast Forest Stewardship Plan* covers activities in Block 5, and it was approved in May 2018.

As there were no harvesting or road construction activities in Block 5 during the audit period, auditors focussed on the operational planning for Block 2, examining the FSP and stand-level site plans for consistency with legal requirements and government orders, including old growth and wildlife. The FSP must be consistent with government objectives set out in the *Vancouver Island Land Use Plan Higher Level Plan Order* and the *Sayward Landscape Unit Plan Order*. The relevant requirements of these government objectives are written into the FSP.

Auditors also confirmed whether site plans accurately identified site conditions during field sampling.

**Timber Harvesting**

Western harvested 69 cutblocks, totalling approximately 2900 hectares, during the audit period. Auditors examined 53 cutblocks.

**Road and Major Structure Construction, Maintenance and Deactivation**

The population and sample of road and major structure activities are summarized in Table 1. No roads were deactivated during the audit period.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road Construction</td>
<td>77 km</td>
<td>37 km</td>
</tr>
<tr>
<td>Road Maintenance</td>
<td>3187 km</td>
<td>1104 km</td>
</tr>
<tr>
<td>Structure Construction</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Structure Maintenance</td>
<td>264</td>
<td>85</td>
</tr>
<tr>
<td>Structure Deactivation</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Silviculture Obligations and Activities**

The silviculture activities (refer to Table 2) undertaken during the audit period were planting seedlings, protecting seedlings from wildlife damage, and brushing. Auditors also examined regeneration and free-growing obligations, and checked that seed transfer guidelines were adhered to.
Table 2. Summary of silviculture activities

<table>
<thead>
<tr>
<th>Activity of Obligation</th>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting</td>
<td>76 blocks</td>
<td>16 blocks</td>
</tr>
<tr>
<td>Seedling protection</td>
<td>10 blocks</td>
<td>3 blocks</td>
</tr>
<tr>
<td>Brushing</td>
<td>19 blocks</td>
<td>11 blocks</td>
</tr>
<tr>
<td>Regeneration due and declared</td>
<td>125 blocks</td>
<td>32 blocks</td>
</tr>
<tr>
<td>Free-growing due and declared</td>
<td>74 blocks</td>
<td>30 blocks</td>
</tr>
</tbody>
</table>

Wildfire Protection

Auditors examined fire hazard assessment and abatement practices and wildfire preparedness as part of the harvest sampling. Due to the forest fire danger at the time of the audit, operations were on early shift. Only one active harvesting site was encountered during field sampling and auditors examined fire preparedness.

Findings

Operational Planning

Planning was consistent with the FSP and legal requirements, including government orders. Western addressed site specific resources in the site plans by accurately identifying and prescribing practices for resource features including streams and wetlands, wildlife habitat, visual quality objectives and old growth management areas.

Auditors had no concerns with operational planning.

Timber Harvesting

Harvesting was conducted in accordance with the requirements of legislation and site plans. Soil disturbance was well managed and minimized, and natural drainage patterns were maintained. Machine-free zones were maintained as prescribed in all cases. Riparian features were accurately identified and protected. Twelve of the cutblocks were located in areas with established visual quality objectives and the block design and layout of internal retention appeared to be adequate to meet the visual quality objectives in all sampled cutblocks.

Auditors had no concerns with harvesting.

Road and Major Structure Construction, Maintenance, and Deactivation

Road Construction

Roads were well-constructed and natural surface drainage patterns were maintained. Culverts were adequately sized and the inlets and outlets were armored.

Road Maintenance

Western promptly cleans logging debris from ditches and culverts when harvesting is complete. In Block 5, many roads were heavily brushed-in due to the lack of activity and are considered wilderness roads. Both active and wilderness roads were maintained to a suitable standard.
Structure Construction
All required documentation was complete and accurate, and structures were built according to the plan.

Structure Maintenance
Western maintains a comprehensive inventory and maintenance system for its structures. The system includes all required documentation. Inspections are up-to-date, and although the majority of structures in Block 5 are inaccessible by vehicle, many were inspected by a qualified professional in 2018.

Structure Deactivation
Two of the six structures constructed were also removed during the audit period. The roads were blocked and the stream channels were armored and stable.

Auditors had no concerns with any of the road or structure work carried out by Western.

Silviculture
There were no issues with silviculture activities or obligations. The main forest health concern is elk damage and management strategies include planting white pine, which is resistant to browsing, and using seedling protectors. Brushing targeted only problem areas and non-crop species were retained where possible. Western plants cutblocks promptly and auditors had no concerns with regeneration or establishing free-growing stands.

Wildfire Protection

Fire Preparedness
Each day, Western’s staff receive an email weather report listing each weather station, fire weather information, the danger class, and any restrictions on high-risk activities. The sole active worksite encountered during field auditing was well-prepared for wildfire and all activities met the requirements of the Wildfire Regulation.

Fire Hazard Assessment
Western has developed a "Fire Hazard Assessment Standard” (FHAS). The FHAS describes and interprets legislation related to managing the fuel hazards generated by industrial activities, and provides the professional rationale supporting the specification of intervals and periods and abatement prescriptions. There is also a companion document to plan abatement activities, which includes an assessment of the fuel hazard and its associated risk of a fire starting or spreading.

Fire Hazard Abatement
Field inspections revealed that slash was either piled or piled and burned on all cutblocks, other than those that were actively being harvested.

In summary, auditors had no concerns with hazard assessment, abatement, or wildfire preparedness.
Audit Opinion

In my opinion, the operational planning, timber harvesting, road and major structure construction, maintenance and deactivation, and fire protection activities carried out by Western Forest Products Inc. on TFL 39 blocks 2 and 5 between July 1, 2017, and July 27, 2018, complied in all significant respects with the requirements of the Forest and Range Practices Act, the Wildfire Act and related regulations, as of July 2018.

In reference to compliance, the term “in all significant respects” recognizes that there may be minor instances of non-compliance that either may not be detected by the audit, or that are detected but not considered worthy of inclusion in the audit report.

The Audit Approach and Scope and the Planning and Practices Examined sections of this report describe the basis of the audit work performed in reaching the above conclusion. The audit was conducted in accordance with the auditing standards of the Forest Practices Board, including adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Such an audit includes examining sufficient forest planning and practices to support an overall evaluation of compliance with the Forest and Range Practices Act, and the Wildfire Act.

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Victoria, British Columbia
November 15, 2018
Appendix 1:  
Forest Practices Board Compliance Audit Process

Background

The Forest Practices Board conducts audits of government and agreement-holders under the *Forest and Range Practices Act* (FRPA), section 122, and the *Wildfire Act*. Compliance audits examine forest or range planning and practices to determine whether or not they meet FRPA and / or *Wildfire Act* requirements. The Board conducts about 10 compliance audits annually. Most of these are audits of agreement holders. The Board also audits the government’s BC Timber Sales Program (BCTS).

Selection of auditees

To begin with, auditors randomly select an area of the Province, such as a natural resource district. Then the auditors review the forest resources, geographic features, operating conditions and other factors in the area selected. These are considered in conjunction with Board strategic priorities (updated annually), and the type of audit is determined. At this stage, auditors choose the auditee(s) that best suits the selected risk and priorities. The audit selections are not based on past performance.

For example, in 2016, the Board randomly selected the Dawson Creek portion of the Peace Natural Resource District as a location for an audit. After assessing the activities within the area, it was noted that there were two community forest agreements that had not yet been audited by the Board. As the Board strives to audit an array of licence types and sizes each year, these two community forest agreements were selected for audit.

For BCTS audits, a district or timber supply area within 2 of the 12 business areas in the province is selected randomly for audit. Only those areas that have not been audited by the Board in the past five years are eligible for selection.

Audit Standards

The audits are conducted in accordance with auditing standards developed by the Board. These standards include adherence to the auditor independence standards and the ethical requirements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour and are consistent with Canadian generally accepted auditing standards. The standards for compliance audits are described in the Board’s *Compliance Audit Reference Manual*.

Audit Process

Conducting the Audit

Once the Board randomly selects an area or district and determines the scope of audit to be conducted and the licensee(s) to be audited, all activities carried out during the period subject to audit are identified (such as harvesting or replanting, and road construction or deactivation activities). Items that make up each forest activity are referred to as a population. For example, all sites harvested form the timber harvesting population and all road sections constructed form the road construction population.
A separate sample is then selected for each population (e.g., the cutblocks selected for auditing timber harvesting). Within each population, more audit effort (i.e., more audit sampling) is allocated to areas where the risk of non-compliance is greater. For smaller audits, the sample will include the full population.

Auditors’ work includes interviewing licensee staff, reviewing applicable plans, assessing features from helicopters and measuring specific features like riparian reserve zone width using ground procedures. The audit teams generally spend three to five days in the field.

**Evaluating the Results**

The Board recognizes that compliance with the requirements of FRPA and the *Wildfire Act* is more a matter of degree than absolute adherence. Determining compliance, and assessing the significance of non-compliance, requires the exercise of professional judgment within the direction provided by the Board.

The audit team, composed of professionals and technical experts, first determines whether forest practices comply with legal requirements. For those practices considered to not be in compliance, the audit team then evaluates the significance of the non-compliance, based on a number of criteria, including the magnitude of the event, the frequency of its occurrence and the severity of the consequences.

Auditors categorize their findings into the following levels of compliance:

**Compliance** – where the auditor finds that practices meet FRPA and *Wildfire Act* requirements.

**Unsound Practice** – where the auditor identifies a significant practice that, although in compliance with FRPA or the *Wildfire Act*, is not considered to be sound management.

**Not significant non-compliance** – where the auditor, upon reaching a non-compliance conclusion, determines that one or more non-compliance event(s) is not significant and not generally worthy of reporting. However, in certain circumstances, these events may be reported as an area requiring improvement.

**Significant non-compliance** – where the auditor determines a non-compliance event(s) or condition(s) is, or has the potential to be, significant and is considered worthy of reporting.

**Significant breach** – where the auditor finds that significant harm has occurred, or is beginning to occur, to persons or the environment as a result of one or more non-compliance events.

If a significant breach of the legislation has occurred, the auditor is required by the *Forest Practices Board Regulation* to immediately advise the Board, the party being audited, and the Minister of Forests, Lands, Natural Resource Operations and Rural Development.
Reporting

Based on the above evaluation, the auditor then prepares a draft audit report. The party being audited is given a copy of the draft report for review and comment before it is submitted to the Board.

The Board reviews the draft report and determines if the audit findings may adversely affect any party or person. If so, the party or person must be given an opportunity to make representations before the Board decides the matter and issues a final report. The representations allow parties that may potentially be adversely affected to present their views to the Board.

The Board reviews representations from parties that may potentially be adversely affected, makes any necessary changes to the report, and decides if recommendations are warranted. The report is then finalized and released: first to the auditee and then to the public and government seven days later.

ENDNOTES

1 A forest stewardship plan (FSP) is a key planning element in the FRPA framework and the only plan subject to public review and comment and government approval. In its FSP, BCTS is required to identify results and/or strategies consistent with government objectives for values such as water, wildlife and soils. These results and strategies must be measurable and once approved are subject to government enforcement. FSPs identify areas within which road construction and harvesting will occur but are not required to show the specific locations of future roads and cutblocks. FSPs can have a term of up to five years.